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ATTITUDES OF THE JAPANESE IRON AND STEEL INDUSTRY TO INDIAN PIG IRON IMPORTS, 1919-1929.

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Despite international attempts to reestablish the prewar free-trade economic system, the 1920s represented a period of flux in economic relations, as countries attempted to sustain economic advantage through more overt business-government cooperation. In this context this paper will look at the political and economic factors involved in the interaction between Indian and Japanese economic development. The particular focus will be the respective impacts of the development of the Japanese pig iron industry on Indian imports, and the Indian cotton manufacturing industry on Japanese imports. Both processes raised questions of what was the most effective way of stimulating domestic production without alienating an important overseas supplier, with whom there was a strong interest in maintaining access in that country's domestic market.

Keywords: PIG IRON, COTTON TEXTILES, TARIFFS, TRADE, FREE-TRADE, PROTECTION.

The disruptions of World War One to the European and American economies, along with world trade, was an opportunity for economic development that was seized by both Japan and India. A world free from more 'advanced' competitors not only promoted domestic industries and foreign trade, it also led to a boom in trade between the two countries, a position that was retained even after the return of European and American competitors following the cessation of war. However, trade between Japan and India was conducted among a narrow range of goods: in manufactured goods it was centered upon Japanese exports of cotton yarn and piece-goods to India and Indian exports of pig iron to Japan; the export of Indian raw materials, such as jute and raw cotton, to Japan; and lastly in the Indo-Japanese carrying trade where Japanese shipping companies were making significant inroads into what was formerly considered a British preserve.[1] Still while trade was expanding the narrow range pointed to an unstable relationship, as fluctuations in one sector could have an enormous impact on the whole of Indo-Japanese trade. Furthermore this weak structural basis was also complicated by the prevalent national economic development ideologies in Japan and India, as elsewhere, which increasingly placed domestic economic interests before the needs of an international free trade economic system. Pressures for government support, i.e. tariff protection, generated by the poor performance of one sector could be easier to grant because of the relative narrowness of Indo-Japanese trade relations. In this regard market performance and expectations could be an important factor in determining attitudes to foreign competition. Actual or perceived market deterioration could be a significant factor in fermenting pressure for import substitution policies. Finally this instability was increased by the fractious nature of Anglo-Indian political and economic relations, as the Indian nationalists and British authorities sought to redefine the subcontinent's political and economic system to their own advantage. Thus a somewhat fragile trade pattern could easily be the victim of the machinations of various interest groups in their respective domestic political systems. In these circumstances this paper intends to explore the attitudes of Japanese business groups to their own industrial development in relation to their trading relationship with India. The focus will be on the trade of manufactured goods in order to see if Japanese demands for industrial development were in harmony with Indian aspirations for industrial development. Primarily, whether Japanese demands for self-sufficiency in iron production, together with the continued unhindered export of cotton goods to India, were compatible with Indian demands for the development of its own cotton textile industry and export of pig iron to Japan.

Despite the fact that the unprotected Indian market offered a huge market for Japanese cotton textile manufacturers, this market was becoming increasingly dominated by India's own mill produced cotton textiles. Wartime opportunities and the introduction of a revenue tariff in 1917, which was increased in 1921 (the effective rate of protection was again raised in 1925), enabled the Indian industry to grow dramatically behind this protective barrier. Between 1916 and 1929 Indian mill production of cotton piece-goods rose from 1,332 to 2,286 thousand yards per year, as it increased its share of the domestic market from around 40% to over 50% (table 1). A substantial achievement given the late development of the industry when compared with many of its international competitors,

Table 1. Indian, British, and Japanese shares of the Indian cotton piece-good market, 1916-1929 (thousands of yards/percent).

Year	Indian Consumption	Indian Mill Production		Imports from Britain			Imports from Japan		
		Volume	Percentage of Consumption	Volume	Percentage of Total Indian Consumption	Percentage of Total Cotton Piece-Good Exports	Volume	Percentage of Total Indian Consumption	Percentage of Total Cotton Piece-Good Exports
1916	3,223.4	1,331.8	41.3	1,747.9	54.2	33.3	100.0	3.1	18.7
1917	2,947.8	1,424.6	48.3	1,403.9	47.6	28.2	94.4	3.2	11.9
1918	2,398.9	1,301.6	54.2	851.3	35.5	23.0	238.0	9.9	23.6
1919	2,506.7	1,443.2	57.6	962.5	38.4	27.3	75.8	3.0	8.6
1920	2,925.5	1,434.4	49.0	1,277.2	43.6	28.8	170.2	5.8	20.3
1921	2,645.5	1,570.6	59.4	947.2	35.8	31.2	90.1	3.4	13.1
1922	3,145.3	1,568.2	49.8	1,440.6	45.8	33.4	107.6	3.4	13.8
1923	3,001.6	1,535.0	51.1	1,306.1	43.5	30.2	122.6	4.1	13.9
1924	3,590.1	1,788.9	49.8	1,589.7	44.5	34.7	155.1	4.1	15.4
1925	3,329.6	1,789.7	53.7	1,274.9	38.3	27.5	216.7	6.5	16.7
1926	3,828.0	2,061.3	53.8	1,457.2	38.1	37.1	243.4	6.3	17.1
1927	4,124.7	2,188.0	53.0	1,530.0	37.1	36.5	322.8	7.8	21.8
1928	3,643.6	1,744.1	47.9	1,442.5	39.6	36.3	356.8	9.8	25.1
1929	4,168.0	2,285.6	54.8	1,235.0	29.6	32.8	561.6	13.5	31.4

[Sources: *Review of the Trade of India: Annual Statement of the Sea-Borne Trade of British India with the British Empire and Foreign Countries*. Department of Commercial Intelligence and Statistics, Delhi; *Accounts Relating to the Sea-Borne Trade and Navigation of British India*. Department of Commercial Intelligence and Statistics, various years, Calcutta; *Statitical Abstract of United Kingdom*. HMSO, London; Seki K. (1956): *The Cotton Industry of Japan*. Japan Society for the Promotion of Science, Tokyo, pp. 306-307.]

and the preclusion of protective measures throughout the nineteenth and early-twentieth centuries. However, it was also clear that foreign imports still retained a substantial share of Indian consumption throughout the 1920s, as India remained the worlds largest importer of cotton piece goods. The size and erratic growth of Indian cotton textile production ensured a more than adequate market for Japanese manufacturers.

Before World War One Indian cotton piece-good imports[2] had been dominated by Britain, and despite its falling share of total Indian consumption, it was a position it retained throughout the 1920s. However, this British dominance was being increasingly challenged by Japan, whose manufacturers had taken advantage of the wartime disruption to British trade patterns by establishing a foothold in the Indian market.[3] Moreover, following a period of postwar readjustment, in keeping with arguments that Japan had to expand beyond its established American and Chinese markets and develop trade links throughout Asia,[4] it was a position it resumed in the 1920s. By 1929 Japan supplied nearly 30% of total Indian cotton piece-good imports which represented 10% of total Indian consumption. India proved an important export market for Japanese cotton manufacturers - one of Japan's premier export industries throughout the interwar period - as it took an increasingly large slice of these exports (table 1). The advantages of the Japanese cotton industry over both the Indian and British manufacturers stemmed from the competitiveness of their product, a result of superior organization and equipment, a low wage economy coupled with high levels of labour efficiency, and its orientation towards the more demand-inelastic course cotton piece-good market. There was considerable foreign admiration for the efficient vertical organization of the principal exporters of the Japanese cotton industry - the 9 major combines of the Japan Cotton Spinners' Association - who controlled most of the processes of textile manufacture from the purchase of raw cotton to the export and selling of the finished product.[5] Throughout the 1920s, through the introduction of new machinery coupled with more flexible labour management, the Japanese cotton manufacturers were able to make substantial gains in labour efficiency,[6] so that they could compete effectively with both 'advanced' high wage and 'backward' low wage competitors. Figures of the Fuji Gas Spinning Company for yarn production of under 40 counts in early-1932, i.e. coarse yarn, indicate that, even after taking into account the December 1931 devaluation of the yen, the Japanese spinners costs for producing one bale of cotton yarn were substantially less than those of their British and Indian rivals.[7] In aiming their products at the coarse goods market Japanese cotton manufacturers derived enormous cost advantages from using cheaper raw material inputs, particularly short staple Indian raw cotton.[8] This orientation towards coarser and cheaper products paid dividends in the 1920s.[9] The noted postwar decline in Indian *per capita* consumption of cotton textiles,[10] a result of consumer impoverishment, meant that demand held up better in the coarser and cheaper cotton textile sectors: the area in which Japanese exports were concentrated. Thus Japanese competition posed a serious challenge to Indian manufacturers and British exporters throughout the 1920s.

In contrast to the cotton trade the Indo-Japanese iron trade was centered around the export of Indian pig iron to Japan. Opportunities for Indian iron exports stemmed from the unbalanced development of Japanese iron and steel production. The relatively slow development of the iron industry meant that there was a serious shortfall in domestic iron making capacity in relation to steel capacity and general demand for pig iron. A shortfall that was eagerly bridged by overseas suppliers of pig and scrap iron. Between 1920 and 1925 while Japan's average pig iron production was around 660,000 tons per year, it consumed on average 985,000 tons per year, thus imports supplied about one third of total annual pig iron consumption.[11] However, the role of imported pig iron was even stronger in Japan's open market. Japan's largest producer of pig iron the state owned Yawata works, the only truly integrated iron and steel producer, supplied none of its pig iron production or imported Chinese pig iron for sale in the open market. Taking this into consideration, foreign pig iron supplied 50% of the open market (table 2), so that imported pig iron held a substantial share of the Japanese market.[12] Even before World War One the Indian iron industry was already a major supplier of pig iron to Japan, and following a period of readjustment immediately after the end of the war, it secured its position as the principal foreign supplier to the Japanese market: a position it sustained throughout the 1920s. Around 1922-23 Indian pig iron imports overtook all other foreign suppliers, between 1922 and 1925 they accounted for nearly 40% of total imports, which represented some 13% of total Japanese pig iron consumption,[13] although given the structure of the Japanese iron and steel industry it held a much larger share in specific sectors of the open market.[14] Indian import penetration was facilitated not only by the shortfall in Japanese iron production but also by the relatively low cost of its product. Furthermore, the export of pig iron to Japan was equally important for the Indian iron industry as Japan remained its best overseas customer throughout the 1920s. With only a

Table 2. Japanese Pig Iron Demand and Supply, 1914-1926 (thousand tons).

Year	Domestic Production		Imports				Consumption (i)	Consumption (ii)
	Total	Yawata	Total	Manchuria	India	China		
1914	300	222	169	0	31	55	469	192
1915	318	247	167	16	38	83	484	155
1916	389	302	232	44	63	102	621	216
1917	451	305	232	35	61	110	680	265
1918	625	272	225	33	7	158	844	414
1919	674	281	283	65	29	95	943	566
1920	605	243	349	37	48	141	947	564
1921	556	354	227	78	34	76	781	350
1922	634	454	328	76	101	129	960	378
1923	700	491	346	57	137	98	1,044	455
1924	686	477	442	62	160	165	1,125	483
1925	784	556	316	105	153	48	1,098	495
1926	925	640	400	160	228	4	1,324	680

Notes. Consumption (i): Production plus imports minus re-exports. Consumption (ii): Consumption (i) minus Yawata's production and Chinese imports.

[Source: Okazaki T. (1993): *Nihon no Kōgyō to Tekkōsangyō: Keizai Hatten no Hikaku Seido Bunseki* [Japanese Industrialization and the Iron and Steel Industry: A Comparative Institutional Analysis of Economic Development]. Tokyo Daigaku Shuppankai, Tokyo, table 3-1, p. 36.]

limited domestic market Indian iron firms exported some 30-40% of their output, and during this period around 70-90% of these exports went to Japan. [15]

Compared to domestic and other overseas producers Indian pig iron proved significantly cheaper: its market price of around 53 yen per ton in the mid-1920s was considerably below the average market and Japanese producer prices (table 3).[16] At such prices Indian pig iron prices proved irresistible to steel producers and iron users. Only the Chinese pig iron industry could offer significant price competition with the Indian product, but post-1925 management problems severely reduced their export capacity.[17] The structure of the Indian iron and steel industry with its lopsided development in favour of pig iron production - a reversal of the Japanese structure - ensured it had a large volume of iron available for export.[18] Compared with the Japanese iron industry Indian price competitiveness stemmed from the larger scale of their facilities, higher operating rates, the abundant supply of cheaper raw materials, particularly iron ore, and relatively lower labour costs. Only the state operated Yawata works, including its Toyo Iron component,[19] compared in size with the Tata Iron and Steel Company and its production capacity of 610,000 tons of pig iron per year in 1925,[20] India's largest iron producer and only integrated producer. Moreover, Tata's 90% operating rate between April 1924 and March 1925 far exceeded the performance of the majority of the private Japanese iron concerns.[21] Indian productive efficiency was significantly enhanced by the introduction, from 1923, of ultra-modern American blast furnaces at the newly formed Indian Iron and Steel Company (IISCO).[22] In regard to raw material costs while there was little difference in coke costs, Indian iron producers held a substantial advantage in iron ore costs over their Japanese rivals throughout the 1920s, which was nearly a 70% advantage in 1927.[23] Assessing labour costs is more difficult, since although Indian pay rates were substantially lower than Japanese rates, a combination of lower rates of labour efficiency and the need to employ numerous highly paid European technical specialists significantly increased Indian iron producers labour costs.[24] Finally, the Indian penetration of the Japanese pig iron market was facilitated by the establishment of competitive Indo-Japan shipping routes by Japanese firms prior to 1918.[25] However, while the price competitiveness of Indian pig iron appeared to ensure it a formidable position in the Japanese market, this

Table 3. Price of Imported Pig Iron, 1920-1926 (yen per ton).

Year	Average Imported Price	India	Average Market Price
1920	116	111	133
1921	81	80	78
1922	54	56	69
1923	51	48	67
1924	52	52	64
1925	53	55	59
1926	42	42	58

[Source: Iida K. *et al.* (1969): *Gendai Nihon Sangyo Hattatsushi, IV, Tekkō* [A History of the Development of Modern Japanese Industries, vol. IV, Iron and Steel]. Kojunsha, Tokyo, p. 210.]

security was clouded by the continued development of the Japanese iron industry and its demands for the promotion of domestic iron capacity through tariff protection.

1) The Government's Rejection of Iron Industry Protection.

During World War One and in the immediate postwar years Japan engaged in a heated debate over the future requirements of its domestic industries, in regard to the promotion of strategic, and in many cases war-expanded industries, and in particular over the merits of import substitution via tariff protection.[26] Naturally, the iron and steel industry was a central component of this debate, and although Indian pig iron imports had not yet made a significant impact in the Japanese market, any immediate postwar grant of tariff protection to the iron industry would have been a significant impediment to the Indian penetration of the Japanese market. However, in the early postwar years the situation of the Japanese iron and steel industry represented a curious paradox that fostered widely divergent views on what was the best policy for the promotion of the industry. While the concept of promoting important strategic industries was virtually unchallenged, the structural imbalance between the iron and steel industries, together with the combination of postwar international attitudes to tariff protection, Japanese trade treaty obligations, and the development of Japanese iron production facilities in Japanese 'dominated' Manchuria, acted as impediments to the selective protection of the iron industry.

Iron and steel making capacity had expanded during the wartime interregnum, but while the iron producers looked to government protection to secure their future from cheap foreign pig iron imports, the steel producers saw cheap pig iron imports as a vital component for their continued development. Pressures within the Japanese market ensured the rapid deterioration of business conditions for the iron producers. Between 1920 and 1925 while the price of steel bars declined by 48.8% the price of pig iron fell by 55.6%.[27] The unbalanced decline of steel and pig iron prices, supported by cheap imported pig iron and the extension of protection to steel products while benefiting steel producers made but it difficult for iron producers to make a profit:[28] even within the post-1921-22 expanding domestic market.[29] Until 1925 the actual operating rate of the four major private domestic iron producers remained relatively low.[30] However, since private steel makers faced strong competition from Yawata and foreign imports, in order to survive in the domestic market, they had little option but to rely upon cheap imported pig iron. Thus pressure from non-integrated steel producers was a critical underpinning to the calamitous decline in pig iron prices:[31] acting as a fundamental obstacle to the protection of iron producers.

The international environment of the early-1920s also contributed to the Japanese government's reluctance to adopt widespread protectionism. While this had no direct bearing on the debate on the pig iron tariff numerous Japanese businessmen and officials shared the popular international sentiment for a return to prewar *laissez faire* trade policies. Despite many breaches of this doctrine the sentiment did inhibit the adoption of wide-ranging tariff protectionism, and in Japan was evidenced in the belief that its trade deficit should be solved through greater industrial competitiveness and not protectionism.[32] Furthermore existing international treaties combined with the development of Japanese iron production facilities in Manchuria - by 1919 both Okura

Mining (a leading zaibatsu) and the quasi-public South Manchurian Railway Company (SMRC) operated iron producing plants in Manchuria[33] – hindered the establishment of domestic pig iron protection. Japanese iron producers accepted that protection of the domestic and Korean based industry must be extended to Japanese operated plants in Manchuria. However, international treaty arrangements limited the governments room for manouvre. In February 1921 the Special Financial and Economic Investigation Council recognized that the terms of the pig iron tariff pact, which was part of the 1911 Anglo-Japanese Trade Treaty, prevented the introduction of a pig iron subsidy as a substitute for tariff protection. This obstacle was not removed until the exchange of official notes between Britain and Japan, which canceled the tariff pact as of March 1925.[34] Similarly, demands in late-1924 for the protection of the domestic and Manchurian iron industry, i.e. the introduction of a preferential tariff, ran counter to the terms of the same Trade Treaty. If a preferential tariff was to be established, as then favoured by the Ministry of Commerce and Agriculture, it was recognized that the Trade Treaty would have to be renegotiated.[35] Thus the combination of treaty obligations in conjunction with the development of Japanese iron plants in Manchuria, acted as a clear brake on iron industry protection prior to 1925.

In the first half of the 1920s there were two attempts by the Japanese iron industry to establish some form of tariff protection for the domestic market, in the immediate aftermath of World War One and again from around 1924. In response to worsening postwar economic conditions, like many iron and steel, and other manufacturing industries,[36] the Japanese industry reacted to the postwar slump and the resumption of foreign competition by seeking government assistance. These appeals were centered on the vital role of the iron and steel industry for domestic industrialization and military security. In February 1919, reflecting iron and steel industry opinion in the immediate aftermath of the November 1918 European Armistice,[37] both the Japan Industrial Club, the most prestigious non-sectoral industrial organization,[38] and the Iron and Steel Institute of Japan, the highly respected information organ of the iron and steel industry,[39] submitted reports to the Minister of Agriculture and Commerce which recommended domestic protection and government promotion of the iron and steel industry. The respective report investigation committees, dominated by the same iron interests, naturally reflected the viewpoint that promotion and protection had to be extended to both the iron and steel industries.[40] In regard to tariff protection, citing European and North American examples, both reports argued the case for the thoroughgoing abandonment of the current low tariff system through the immediate administrative management of iron and steel imports, tariff increases, and the introduction of an anti-dumping law.[41] As part of this campaign, Imaizumi Kachirō, a director of the Iron and Steel Institute and a leading proponent of both the Institute's and Industrial Club's February 1919 petitions, summed up the attitude of the private iron and steel makers to foreign competition. In his opinion the problems of the industry were not due to organizational shortcomings, but stemmed from the pressure of foreign competition, which could only be solved by tariff protection.[42] For the Japanese iron and steel interests foreign imports, and in particular 'deliberate export dumping', posed a critical threat to their infant industry, one which could only be dealt with by government sponsored protection. Still it should be noted that not all iron and steel industrialists shared this viewpoint. In particular the managers of the Yawata works, who had exceptionally close ties with the Ministry of Agriculture and Commerce, argued that protection would not solve the industry's problems. In 1922, Hakuni Takeshi, the Chief Officer of the Yawata Works, in a paper mainly aimed at countering arguments for the compulsory cartelization of the industry, stated that the high production costs of the Japanese iron and steel industry were the result of less advanced technology and inefficiency management. Given this situation protection would be detrimental to the Japanese economy, since they would only increase domestic prices.[43]

However, despite the increase in tariff protection for several newly established industries between 1920 and 1923,[44] the government proved reluctant to hinder the development of the steel industry by extending protection to the iron industry. In September 1919 the government formed the Special Investigation Committee on Fiscal Policy and the Economy, to which it added the question of iron and steel promotion in November 1919. Although its membership was similar to that of the Japan Industrial Club's 1919 report committee, progress was slow and its final report did not emerge until February 1921. Once again the authors recommended tariff increases and promotional subsidies for both the iron and steel industries: a 10% *ad valorem* duty on pig iron and a 15% *ad valorem* duty on steel. However, while the government did introduce a 10-15% duty on steel products, it refused to change the low 1.66 yen per ton specific pig iron duty (equivalent to a 2% *ad valorem* tariff rate on the current average import price (table 3)) or introduce a tariff on scrap iron, arguing that the Anglo-Japanese Trade Treaty prohibited such actions, but in reality because "it did not want to stunt the rapid growth of steel producers who were using cheaper imported pig iron and scrap".[45] Thus the dependency of the Japanese steel industry on imported iron products remained the major obstacle to the protection of the domestic iron and steel industry, which ensured that in the early-1920s Indian pig iron would have relatively unhindered access to the Japanese market. At this stage since Indian pig iron was not a significant factor in the Japanese market there was no need to consider the implication of a pig iron tariff increase on Indo-Japanese trade relations.

2) The Emergence of Indian Pig Iron Imports.

As noted earlier it was around 1922-23 that Indian pig iron emerged as the leading foreign supplier of the Japanese market, responding to the growing iron market and demand for pig iron commensurate with the growth of Japanese steel production.[46] The Japanese were quick to recognize the competitive challenge that Indian iron imports posed to the domestic industry. In January 1922, *Tetsu to Hagane* [Iron and Steel], the monthly journal of the Iron and Steel Institute, carried a translated article from the *Iron & Coal Trade Review*, 4 November, 1921, that outlined the recent achievements of the Indian iron and steel industry, how it was as competitive as British and American producers, and that the Indian iron and steel industry would make a substantial impact in the world market.[47] In recognition of the importance of Indian pig iron to Japan, in January 1923 the whole of *Tetsu to Hagane* was devoted to coverage of the Indian iron and steel industry. It readily accepted that a variety of natural and economic advantages, in particular low raw material and labour costs coupled with railway discounts, enabled the Indian's to produced low cost pig iron.[48] While the Japanese iron producers were prepared to accept that Indian pig iron was not produced by 'unfair' methods, or being 'dumped' in the Japanese market, the low price of Indian iron imports was seen as a serious threat to the Japanese iron industry's profitability. As the iron industry submitted proposals for tariff protection Imaizumi Kachirō argued that since the industry's development was critical to the empire's economy, a degree of tariff protection was necessary as the domestic iron industry could not yet compete with importers prices.[49] Even the more skeptical Hakuni Takeshi accepted that the increased volume of cheap pig iron imports would inevitably lead to price falls, against which certain 'measures' might be necessary.[50] Although seldom mentioned by name, given the concern over increased low priced Indian iron imports,[51] such references could only be aimed at the Indian competition. However, while the ultimate aim of the Japanese iron industry was for national self-sufficiency and even the development of export markets in East Asia,[52] aside from the import price question, there was no suggestion that the development of the Indian iron industry was in itself a direct threat to the Japanese iron industry.

Nevertheless the Japanese iron producers did have some complaints that the structure of the Indian domestic market and competition between Japanese importers further exacerbated the already low price of Indian pig iron. They were quick to complain that intensified competition between Japanese importers of Indian pig iron had led to rapid price falls which had further destabilized the market.[53] Zaibatsu related iron producers also criticized the low import price of Indian pig iron, since there was a substantial price difference between the higher domestic Indian pig iron price and the lower export price, which in their view was excessive even after the addition of transportation and tariff costs, although it appears that such complaints were not made until after the collapse of domestic demand during the depression.[54] Furthermore, the high domestic Indian pig iron price only related to 18% of pig iron consumption, the remainder was sold at below this 'open' market price to various concerns which had specific tie-ups to the Indian iron producers.[55] In total these were relatively minor complaints and never extended to an outright charge of unfair Indian competition. Still in market environment which was dominated by continuous price falls, harassed Japanese iron producers increasingly demanded tariff protection as the solution to their problems.

In contrast to those groups who stressed iron self-sufficiency some Japanese firms welcomed the arrival of cheap Indian pig iron on the Japanese market. Before World War One Kishimoto Shōten, the principal importer of Indian pig iron in the 1920s, was initially a supporter of the iron self-sufficiency concept. As a promoter of Kobe Steel Tubes, it established the Osaka Iron Company with the intention of it becoming the former's sole pig iron supplier. However, in recognition of the cheapness of Indian pig iron it abandoned this policy and started importing Indian pig iron in 1911. In a further continuation of this policy it then supplied some 16% of the initial capital as part of the postwar establishment of IISCO.[56] Indian pig iron was equally popular among rolled steel producers, who faced stiff competition from cheap European imports, and the Osaka based cast iron and iron pipe producers. The latter of these two groups were particularly tied to the high silicon and manganese, and low sulphur content of Indian pig iron, as the low manganese content of Manchurian pig iron made it an unsuitable substitute. On these grounds alone the various Osaka iron processors argued that "Indian iron is necessary for the making of good quality products" since "replacing Indian iron with domestic [and Manchurian] iron will not improve product quality", and consequently any tariff increase would disrupt the necessary Indian iron supplies.[57] These were the groups that had benefited most from the government's rejection of increasing the pig iron duty in 1921.

Nevertheless, the continued poor business conditions in the Japanese iron industry renewed pressures for the adoption of some form of protection for the domestic, and Manchurian based industry. Demands that if adopted would now be to the detriment of the Indian iron industry. In October 1924, a little over a year after cheap Indian pig iron outstripped other importers, two of the leading bodies of the iron and steel industry, the Iron and Steel Institute of Japan and the Japan Industrial Club,[58] both demanded increased tariff protection, which this time must include pig iron. The Institute's 'Proposal Related to the Iron and Steel Tariff' argued that as a result of pig iron imports (i.e. Indian) the industry had fallen into difficult times, and "to escape the dilemma, and for the good directional development [of the industry], the quick thickening of the tariff was a necessity". It requested a massive 12 yen per ton specific iron duty, approximately a 23% *ad valorem* duty at the current import price (table 3), on the grounds that while it would increase prices now in the long-term, under this protective umbrella, rationalization and efficiency gains would lead to a stronger domestic industry, cheaper prices, and finally "in a number of years there would occur a new dawn of a secure industrial base enabling a second downward tariff revision". Furthermore it argued that the Japanese iron industry in Manchuria had to be included in this protectionist scheme.[59] Naturally, independent submissions of the Japanese iron producers gave full support to the above proposals, and strongly emphasized that in regard to the Japanese plants in Manchuria "both foundries were granted the same protection as domestic products for the serious development of one's country".[60] It was these concerns that led to considerations on the need to renegotiate the Anglo-Japanese Trade Treaty, or if this proved impossible for the extension of a production subsidy to the Manchurian iron producers equivalent to any new import duty.[61] In keeping with these submissions, in the December 1924 Iron and Steel Investigation Council, both Dan Takuma, the Chairman of Mitsui Gomei, and Kimura Kusuyata, the President of Mitsubishi Goshi, advocated that tariff increases were a necessary supplement to cartelization.[62] Pro-tariff increase groups received a tremendous boost when the Council's report of May 1925 came out in favour of an iron and steel tariff increase and the development of measures to support Japanese iron producers in Manchuria.[63] Subsequently, comments in *Tetsu to Hagane* for the first time became strident in their condemnation of Indian pig iron imports, arguing that import controls should be instituted in response to the recent surge in iron stockpiles caused primarily by Indian imports.[64]

In response to this growing trend the Indian iron companies via their Japanese importers, sought to protect their position by easing competitive pressures in the Japanese market through a price support and volume control cartel arrangement. As a reaction to the fall in the pig iron price in August 1924 Kishimoto Shōten proposed the formation of an organization aimed at price support. An offer that was again renewed in

September.[65] The Japanese and Manchurian iron producers rejected this overture on the grounds that the continued depreciation of the yen would favour themselves, while the possibility of tariff protection in the near future obviated the need for cooperation with the Indian pig iron producers.[66] However, before the Japanese producers could benefit from its introduction the continued collapse in the pig iron market price posed a more immediate threat to Japanese iron interests. In an attempt to halt this price slide, in March 1925, only six months after rejecting Kishimoto Shōten's proposal, the Iron and Steel Council, perceived as little more than an informal grouping of iron and steel interests, proposed a limited cartel arrangement with the Indian iron importers.[67] There then followed a period of tacit cooperation between the Japanese iron producers and Indian iron importers aimed at price stabilization,[68] while a more formal arrangement was negotiated. In this agreement the Japanese iron producers offered that for the establishment of a minimum selling price Japan's current annual consumption of 460,000 tons would be divided amongst its principal suppliers: the Japanese-Manchurian iron producers would supply 318,000 tons and the Indian iron producers 142,000 tons.[69] Compared with 1924 this represented an 11% reduction India's volume of pig iron exports to Japan, and a 17% increase in the private (i.e. non-Yawata) Japanese production and Manchurian imports (table 2). The Council's plan clearly reflected the belief once again that the continued depreciation in the yen would naturally reduced Indian iron imports.[70] In May 1925, Kawamura Takeshi, in his Chairman's address to the Iron and Steel Institute, predicted that in the pig iron market the current fall in the yen would give gradual relief from the pressure of foreign competition.[71] Both the Indian iron importers and iron producers accepted the plan, however, the Indian iron producers request for an additional 18,000 tons (which meant that this revised total would equal their 1924 export volume) was rejected by the Council, who in fact refused to consider any form of negotiations on their original proposal.[72] Thus the attitude of the Council over the possibility of a limited Indo-Japanese-Manchurian producers cartel was weighted in favour of the latter two, which indicated that in times of economic distress the Japanese would take a hard attitude to foreign competition. Price support in cooperation with Indian iron producers was important, but not as important as the realization of import substitution. The Japanese iron producers were firmly wedded to the idea that the development of their industry depended on the 'exclusion' of foreign imports from the domestic market.

In the face of the pro-protectionist barrage opposition to the pig iron duty increase within the iron and steel industry was becoming increasingly muted. Naturally, the anti-duty increase lobby was led by the Indian pig iron importers, Kishimoto Shōten and Nichi-In Tsūshō, who aside from Mitsui Bussan held the monopoly rights for Indian pig iron sales in Japan. In their respective, October, 1924 'About Iron Industry Protection', and November, 1925 'An Intelligent Plea about the Iron Protection Problem', both trading companies argued that iron industry protection was uneconomical; would not guarantee strategic security, since domestic self-sufficiency in iron production would still be dependent upon iron ore imports; and could only include Manchurian based iron producers with great difficulty and at the risk of foreign retaliation.[73] However, the unity of the iron importers was significantly undermined when Mitsui Bussan reversed its initial position and came out in support of an increase in the pig iron duty.[74] Furthermore, other interests who were dependent upon Indian pig iron imports proved to be too internally divided to offer any effective opposition, or in fact accepted protectionism. The rolled steel producers were split between those who maintained their opposition to any increase in the pig iron duty, and those who now accepted that iron self-sufficiency and a duty increase were unavoidable. Consequently, because of these internal divisions their public organ, the Steel Association (which included steel wholesalers), in its representations refrained from commenting on the pig iron duty, merely confining itself to requesting measures to compensate its members if there was a rise in its raw material costs, i.e. pig iron.[75] Similarly, the iron consumers, e.g. ironworkers and machine makers, accepted that iron industry protection was a suitable national policy, and only argued that the inevitable increase in their raw material costs be compensated by an equivalent tariff increase on similar imported goods.[76] In recognition of the need to support the domestic iron industry in its time of crisis, the Tokyo Iron Industry Association stated that in these circumstances since domestic consumption was only equal to domestic production orders for foreign iron would only be placed with regard to maintaining a suitable market equilibrium.[77] Among this iron consuming group only the Osaka based iron pipe manufacturers and some other miscellaneous iron consumers, who had the closest ties with the Indian iron importers, remained totally opposed to any pig iron tariff increase.[78] However, it was clear by the mid-1920s that groups in favour of a pig iron duty increase were far more forceful than those opposed to such an increase.[79]

However, while the Japanese iron and steel industry debated over the merits of pig iron protection the Japanese also had to contend with its impact upon Indian tariff policy. Like the Japanese, certain Indian industrialists in its premier industrial sector, cotton textiles, had been advocating a protectionist policy: one which would naturally have a detrimental effect upon one of Japan's leading export industries in its most important overseas market. Reversing the previous British imposed denial of protection for the Indian cotton industry,[80] and in recognition of government revenue requirements and the need to placate growing Indian nationalist sentiment, the Indian government was granted a measure of tariff autonomy. The duty on cotton piece-goods was raised to 11% by 1921, and the 3.5% internal excise duty on mill produced cotton piece-goods was suspended in December 1925, and abolished in the following March.[81] Alone this served as an impediment to Japanese export penetration, however, because of the competitiveness of Japanese cotton piece-goods, particularly against the coarser product of the Bombay cotton manufacturers,[82] and continued, if somewhat reduced,[83] British authority over and interest in the Indian market, led to attempts between the British and Bombay cotton manufacturers to establish some form of tariff discrimination against Japanese cotton piece-goods. Indeed the British cotton manufacturers were keen to play on Indian fears of Japanese competition, denying any competitive relationship between British and Indian cotton goods, and pointed out that "India should fear the [more] formidable enemy as Indian goods come into rivalry with Japanese goods".[84] As a reflection of continued British influence over Indian tariff policy and Bombay's fears of Japanese competition successive attempts were made to introduce tariff preference for British goods or tariff discrimination against Japanese goods. In 1922 the Indian Fiscal Commission forcefully rejected British suggestions for the establishment of an Anglo-Indian preferential tariff system.[85] Subsequently, and in deference to British opinion, the Bombay millowners sought to alleviate their continued business problems[86] by pressing for tariff discrimination against Japanese goods. In March 1926 the Bombay cotton manufacturers complained to the Indian government that the abolition of the excise duty had failed to halt Japanese imports, so that the 'unfair' nature of Japanese competition meant that the domestic industry could only be secured through the denunciation of the Indo-Japanese Trade Treaty and the subsequent imposition of a discriminatory duty on Japanese cotton piece-good imports.[87] This demand was later rejected by the Indian government,[88] but coinciding as they did with Japan's own review of its pig iron tariff it made the Japanese cotton manufacturers all to aware of the impact a tariff hike could have on Indian opinion and tariff policy.

Like the Japanese who sought the protection of their domestic iron industry from Indian competition, the Bombay cotton manufacturers argued that unfair Japanese competition threatened an important domestic industry. Sensitive to these charges, in November 1925, the *Monthly Journal of the Great Japan Cotton Spinners'Association* (Dai Nihon Bōseki Rengōkai Geppō) reprinted an editorial of the *Bombay Chronicle*, that gave a vivid outline of Indian fears.

> Concerning the depression in the Indian cotton manufacturing industry even though there are various primary factors, the competition of Japanese yarn and cotton piece-goods should be included as a major factor. Cotton spinning is India's most important industry yet it is seriously threatened by unreasonable price dumping from Japan. Moreover these cheap selling prices are not merely the result of economic factors and result from a lack of international agreement, social propriety, and a total disregard for humanity, or depend upon government subsidies and financial assistance for export promotion.[89]

In response to these Indian demands for discriminatory tariff protection, the Japanese cotton manufacturers defended their right of access to the Indian market: the question of export restraint, as proposed by the Japanese importers of Indian pig iron, was ignored. In December 1921 the Great Japan Cotton Spinners' Association, the principal body of Japan's premier cotton manufacturers, petitioned the Indian government to reject the Anglo-Indian preferential tariff that was under discussion as it would be detrimental to the long-term development of the Japanese cotton industry. Arguing against charges of excessive Japanese competition and undue British influence on Indian tariff policy, they maintained that since British and Japanese cotton goods were dissimilar a preferential tariff for British goods would have little impact on Japanese exports.

> Doubtless, Japanese cotton goods exports to India are different to goods imported from Britain. Consequently, to what degree a preference towards British goods there will probably not be a direct influence on Japanese goods, but over time this will be a constraint on the further development of the Japanese cotton spinning industry, this reality cannot be denied.[90]

However, the Japanese cotton manufacturers while determined to defend their equality of market access proved insensitive to Indian aspirations. In a rather negative comment on Indian demands for the abolition of the excise duty the *Monthly Journal* stated that "it is self-evident that the results of its abolition will only bring disadvantage to ourselves in Indo-Japanese cotton piece-good competition".[91] Even more alarmingly for the Indian cotton manufacturers was the Japanese response to the excise duty abolition, as they immediately reduced their prices in excess of the now defunct duty.[92] A situation that was in total contrast to the 1924 price support offer of the Japanese importers of Indian pig iron.

However, the Japanese opposition to any Indian cotton tariff increase was bolstered by the considerable support they received from various groups within India. Cotton interests, such as the Ahmedabad millowners, who took a more nationalist stance than Bombay and whose goods competed less directly with Japanese cotton textiles, refused to endorse Bombay's demands for tariff discrimination.[93] Exporters, in particular pig iron, jute and raw cotton growers, who had most to fear from Japanese tariff retaliation were strongly opposed to tariff discrimination.[94] A similar attitude was demonstrated by the Indian importers of Japanese cotton goods - paralleling attitudes of the Japanese importers of Indian pig iron – who proved determined to defend Japanese cotton piece-good imports from discriminatory tariff measures. In February 1926, the Calcutta Cotton Yarn and Piece-Good Merchants, in a telegram with 110 signatures, stated that a discriminatory tariff on Japanese goods would only benefit Lancashire and Bombay, and yet would be detrimental to those Indian cotton growers whose exports depended upon a thriving Japanese cotton industry.[95] Although it should be noted that the size of the Indian merchants groups suggests that voluntary import restraint would be far harder to initiate and police than amongst the three Japanese trading companies involved in the import of Indian pig iron. Nevertheless, it is clear that by the mid-1920s while Japanese attitudes on the protection of the domestic iron industry had become firmer, the Indian industry remained totally divided on the need to discriminate against Japanese cotton piece-goods.[96]

3) The Introduction and Impact of the 1926 Pig Iron Subsidy.

Despite the previous reluctance to increase tariffs on iron imports the Japanese government remained concerned over the need to promote the development of the iron and steel industry, outside of tariff protection the other key proposal, put forward by the private iron and steel interests, was the need to rationalize the industry, and if necessary through forced cartelization. However, debates in the early- to mid-1920s had run aground due to opposition of Yawata and the Ministry of Agriculture and Commerce, on the grounds that the domestic iron and steel industry would not benefit from forced cartelization.[97] Finally, in November 1925, Kataoka Naoharu, the Minister of Commerce and Industry, conceded that cartelization was impossible, informing both the Cabinet and the iron and steel interests of this decision. A more limited version of cartelization would be pursued, through various raw material buying and product selling cartels, and in recognition of the pressure for increased protection tariffs would be given special consideration.[98] Thus while tariff increases were used as part of the package to gain support for the creation of a series of limited iron and steel cartels, their upward revision was almost a foregone conclusion. A policy that was no longer opposed by the Ministries of Finance, and Commerce as they had already begun discussions on the pig iron tariff, and while some differences of opinion still existed both Ministries agreed that it was necessary to increase the pig iron duty.[99] However, unlike in the previous debate over pig iron tariff increases, given the scale of Indian pig iron imports and Indian attitudes to Japanese cotton piece-good exports, Indian reactions would now be an important consideration.

In January 1926, with the consent of the Ministry of Finance, Kataoka proposed an increase in both the iron and steel tariffs. In the case of steel imports, through the revision of the existing specific duty, the existing average 15% *ad valorem* steel tariff would be increased to an 18% average, although for some items, such as steel bars, the duty would be raised even further. For domestic iron producers, tariff protection would be introduced by increasing the current low 1.66 yen per ton specific duty to 7 yen per ton,[100] which at the 1925 average import price of about 53 yen per ton was equivalent to a 13.2% *ad valorem* duty (table 3). In order to meet the demands of the Manchurian based iron producers, the Ministry of Commerce proposed the establishment of preferential tariff with Manchuria,[101] thus enabling Manchurian imports to circumvent domestic iron protection. However, the pig iron tariff increase was immediately attacked by the steel producers, who feared higher iron input costs,[102] and, given the state of Indian opinion on Japanese cotton piece-goods, by those who feared Indian tariff retaliation. In the cabinet the Foreign Ministry argued that a preferential tariff ran counter to current treaty arrangements, and raised fears that the introduction of such a tariff arrangement would invite a similar Indian response: contrary to the interests of Japanese exporters.[103] Thus while a combination of opposition from the steel producers and fears of Indian tariff retaliation caused the government to defer judgment on the proposed pig iron duty,[104] it was evident that fears of Indian retaliation against Japanese cotton exports, as championed by the Foreign Ministry, was the decisive factor in preventing the introduction of such a duty.

While the deferral of the pig iron duty increase pleased the steel producers and cotton manufacturers, the government still had to address the question of how to grant some form of 'protection' to the iron industry. On 19 January 1926 a special cabinet meeting was held to debate the problem. This time the backing of Hamaguchi Osachi, the Finance Minister, and Shidehara Kijurō, the Foreign Minister, decisively blocked the Ministry of Commerce's proposed iron tariff increase, the participants decided that iron industry protection would be delivered through a direct production subsidy.[105] In following this decision the Ministry of Commerce immediately devised a scheme so that import substitution would be furnished through direct subsidies for pig iron production (at a rate of 6 yen per ton for pig iron used by the same company for steel production, 5 yen per ton for pig iron sold to other companies for steel production, and 3 yen per ton for pig iron used in casting).[106] These levels of subsidy represented between 42% and 85% of the abandoned specific pig iron duty, or at the 1925 import price of 53 yen per ton about a 5.6-11.3% *ad valorem* tariff rate. If the existing 1.66 yen per ton duty is added it meant that the rate of 'protection' for iron producers who received the 6 yen per ton subsidy now exceeded the proposed 7 yen per ton specific duty, which at 7.66 yen per ton was equivalent to a 14.4% *ad valorem* tariff rate. Naturally with a fixed yen perton subsidy the rate of protection would increase if pig iron prices continued to fall.

In justifying the subsidy policy sensitivity was displayed to foreign opinion and domestic demands that the government must foster the iron and steel industry. In public the Ministry of Commerce, abandoning its earlier advocacy of combining a tariff increase with a Japan-Manchuria preferential tariff arrangement, now argued that the direct subsidy was more logical than a tariff increase, since it would not increase domestic prices and would encourage the development of a more integrated iron and steel industry.[107] In the Diet, Katō Masanosuke, the Chairman of the Tariff Reform Committee, also raised the factor of tariff retaliation as a reason for avoiding tariff increases.

> It is very important for the nation to achieve the self-sufficiency of iron and steel by increasing tariffs. However, the largest iron exporter is India, and she is also one of the most important importers of Japanese cotton products. It must be very unpleasant for India if we increase the tariff on Indian iron.[108]

Still there was some opposition to the direct pig iron subsidy, if from somewhat opposite ends of the trade policy spectrum. Muto Sanji, the former President of the Kanegafuchi Spinning Company and a noted champion of free trade, argued that it was a reward for zaibatsu influence, since only zaibatsu affiliated firms would receive the higher rate of subsidy for iron used in their own steel production, and a betrayal of the Kenseikai Party's commitment to government retrenchment.[109] In contrast Mori Kaku, a Seiyūkai member and supporter of a firm continental policy, stated that it was a mistake for the Ministry of Commerce to cave in to unfounded Foreign Ministry fears of Indian tariff retaliation.[110]

With the announcement of the abandonment of the pig iron tariff increase the Japanese cotton manufacturers were quick to point out to the Indians the restraint demonstrated by the Japanese government, and how their commitment to low tariffs should be reciprocated by India. Accordingly the Cotton Spinners' Association immediately petitioned the Indian government over the need for the Indian government to reject Bombay's demands for the denunciation of the Indo-Japanese Trade Treaty arguing that:

> despite the fact that in numerous states in America and Europe postwar tariff revisions have been elaborately coloured protectionist policies, in Japan, it is now necessary to stop at a minimum degree of protection as a necessary point in the national policy for the pig iron tariff and such like. Also for pig iron exporting countries concern for achieving this environment such [protectionist] increase has been avoided.[111]

However, while the Japanese cotton manufacturers championed their government's rejection of a pig iron tariff increase, any such benefit for the Indian iron producers had been virtually nullified by the introduction of the pig iron production subsidy. Furthermore, the long-term position of Indian iron in the Japanese market was further undermined as the Japanese government, responding to industry demands, extended iron subsidies, in 1927, to the SMRC's and Okura's iron plants that were based in Manchuria. The amount of subsidy was exactly the same as for domestic companies,[112] and was thus a major form of non-tariff discrimination against Indian iron imports. The introduction of direct iron production obviously strengthened the position of the Japanese and Manchurian iron producers vis-a-vis their Indian rivals.

Coupled with the discriminatory iron production subsidy policy there was no abatement in Indo-Japanese friction over Japanese exports of cotton piece-goods to the Indian market. Indian cotton manufacturers remained alarmed at the steady progress of Japanese imports when contrasted with the production problems in the Indian cotton industry (table 1). Following a major strike in 1928-29 the Bombay millowners pressed for increased tariff protection thorough the introduction of a specific duty on cotton piece-goods: a measure which would be more severe on cheaper Japanese imports. This demand was eventually rejected by the Indian government in November 1929.[113] Furthermore the Japanese remained 'ideologically' committed to increasing their manufactured exports to India. In September 1926 the Japanese Ministry of Foreign Affairs sponsored a major conference on Southeast Asian trade which aimed at improving Japan's balance of trade through the export of manufactured goods in the European and American colonies of Southeast Asia and India. Proponents of this export push argued that it could only be secured through the pursuit of free-trade principles, in order to encourage low and nondiscriminatory tariffs against Japanese goods Japan also had to adopt a low tariff system: the products of these trading partners had to be able to penetrate the Japanese market. However, these advocates primarily asked for tariff reduction on raw materials or semi-manufactured goods in which Japan had lost or did not have an international competitive advantage, for example no mention was made of repealing the pig iron production subsidy.[114] Thus Japanese industrialization was to be fostered through export expansion in a *laissez faire* trading system which would only encourage the import of raw materials or goods in which Japan could not compete in the international marketplace. Such arguments simply ignored the fact that many of the industrial interests within these colonies, like the Japanese, now wanted to develop their domestic industries behind suitable tariff walls, let alone encourage the import of manufactured goods from other foreign competitors. It was noticeable that the strike period in the Indian cotton industry in the late-1920s witnessed a surge in Japanese imports, based on the decline of Indian import prices at a time when the Indian market price for cotton piece-goods was increasing.[115] The failings of others were simply opportunities for the pro-free traders in the Japanese cotton industry.

While tensions persisted in the Indian cotton piece-good market more favourable demand and business conditions in the Japanese pig iron market, coupled with the production subsidy, relieved previous stresses. In keeping with the long-term ambitions of the private iron manufacturers the cartel structure of the Japanese and Manchurian iron producers was formalized, with Kataoka's support, by the formation in June 1926 of the Pig Iron Cooperative Association. Leaving Indian iron as the only significant foreign competition of the Association.[116] A particularly daunting prospect for Indian producers since their own production expansion, high operating rates, and investment in further production capacity were more than ever directed at the Japanese market, given the post-1925 appreciation of the yen and the increased American pig iron tariff of 1927.[117] However, an outright confrontation with the Indian iron producers was postponed, as the main concern of the Association was price support,[118] while the sustained expansion of the Japanese iron market improved business conditions for domestic iron producers alleviating the need to curtail Indian access to the Japanese market.[119] The Association established a firm selling cartel aimed at stabilizing prices through regulating output, which until the start of the Depression in the summer of 1929, stabilized domestic pig iron prices at between 40 and 44 yen. This was about 1-2 yen higher than the market price for Indian pig iron.[120] Although outside the cartel structure and while wanting to increase their market share, the Indian iron producers and iron importers responded favourably to the cartels price operations. An October 1926 50 sen reduction in the Association's official quotation was matched by the Indian iron importers, as they sought to defend their established price advantage.[121] However, Indian pig iron did expand its market share when the Indian iron importers did not respond to the Association's quick restoration of the price cut in November 1926.[122] Still despite this minor friction cooperation strengthened subsequently. Indeed the Indian iron importers responded to the summer 1927 financial panic by reducing the price differentials between Indian and domestic pig iron when the Association cut its officially quoted price by 75 sen.[123] Likewise both sides proved equally reluctant, during the summer and autumn of 1927, to agree to a long-term reduction in pig iron prices with the Japanese steel producers.[124] This policy of informal cooperation was more that confirmed at the beginning of 1928 as the Indian iron importers announced that they intended to reduce further the differential between Indian and domestic pig iron prices:

> from henceforth, the attitude will not be to disturb the domestic market by taking out a recklessly cheap persistent sales policy, from the natural domestic price we will work to support conditions of only between a 50 sen to 1 yen price difference.[125]

This attitude was reciprocated by the Association, as it responded to the temporary difficulties of Tata Iron and Steel in the summer of 1928, not by grabbing market share through price reduction, but by actually increasing its official price quotation. The Association's board of directors argued that given the expected increase in demand "there is no necessity for confrontation with Indian iron through strong price decreases".[126] Thus between 1926 and 1929 informal cooperation was the norm. Both the Indian iron producers and their associated importers together with the Japanese and Manchurian iron producers sought to support prices by reducing competition. However, while this informal cooperation was in market contrast to Indo-Japanese competition in the Indian cotton goods market, it was principally sustained by the expectation of continued market growth. The simultaneous collapse of market demand and prices in 1929 ushered in a new era of intensified competition and import substitution.

Conclusion.

The start of the world depression in the summer and autumn of 1929 had a huge and immediate impact on Indo-Japanese trade relations. With almost indecent haste both sides sought to initiate import substitution through tariff protection. Between 1930 and 1933 the Indian government introduced and then successively increased its rate of discriminatory protection on non-British, i.e. Japanese, cotton piece-goods. This process culminated with the Indian 'imposition' of a quota for Japanese cotton piece-good imports in January 1934. In return the Japanese iron industry in cooperation with domestic iron users sought to exclude Indian pig iron from the domestic market by limiting purchases of Indian pig iron. This movement was considerably facilitated by the iron production subsidy which increased in its effect with the massive post-1929 decline in pig iron prices. Then in 1932 the Japanese government increased the tariff on iron imports. Such protectionist measures were far easier to achieve than in the 1920s as in response to the world depression businessmen and governments turned their backs on free-trade. Looked at from this perspective such measures appear the logical outcome of Indian and Japanese business attitudes in the 1920s, making the pursuit of free-trade appear as an aberrant objective. However, since businessmen had little foreknowledge of the approaching depression its effect on the international trade system can also give a false perspective on the trade policies of the 1920s. With this point in mind one can bring out more subtler perspective on Indo-Japanese trade relations prior to 1929. Protectionist measures were introduced but proved limited in there scope. The Indian cotton piece-good tariff was not increased after 1921, and despite strong domestic pressures the British controlled Indian government refused to introduce a discriminatory duty on Japanese goods. In 1926 the Japanese government refrained from increasing the iron duty, though this was more subtly circumvented through the iron production subsidy and its extension to Japanese iron producers in Manchuria. Thus both the Indian iron producers and the Japanese cotton textile manufacturers suffered from the protective measures adopted in their respective export markets, with the former being particularly victimized by the discriminatory nature iron production subsidy when it was extended to the Manchurian iron producers. Still neither measures proved sufficient, or were intended, to exclude either groups from their export markets, and in fact both the Indian iron producers and Japanese cotton manufactures witnessed increases in their exports prior to 1929.

In regard to the attitudes of the Japanese iron producers what is most striking is the importance of market factors in determining its responses to Indian pig iron competition. The perceived threat from Indian imports, especially in terms of price competitiveness, was the key stimulus to the 1924 demands for government protection for the iron industry. In a stagnating market Japanese iron producers could not compete with Indian import prices. There followed a series of demands for the protection of both Japanese and Manchurian iron producers, which was coupled with a refusal to countenance any Indo-Japanese-Manchurian price and volume control agreement which gave any measure of equality to the Indian iron producers. The Japanese iron producers argued that for the economic development and military security a self-sufficient iron industry was a prerequisite, and thus in times of economic distress foreign iron imports had to be restricted. It was an argument they won with the introduction of the iron production subsidy for Japanese and Manchurian producers in 1926 and 1927. What is also noticeable is that once this subsidy measure had been secured and market conditions improved post-1926, the Japanese iron producers were willing to tacitly cooperate with the Indian iron producers over price stabilization. The iron production subsidy was not used to immediately drive Indian iron out of the Japanese market, as market amelioration removed the earlier reasons for not cooperating with Indian iron producers.

However, attitudes over the Indian cotton piece-good market suggest differences from the above model. Market conditions were certainly the major cause of demands for protection, but the more fractured nature of the Indian cotton industry, and political system, together with the diversity of importers and exporters, attenuated demands for protection. The Bombay cotton industry displayed the same desire for government protection from Japanese competition. The greater sustained violence of its denunciations of Japanese competition reflected poor economic conditions of the industry, from which there was no improvement in the late-1920s. However, the strength of Bombay's attacks on Japanese competition was eroded by: the desire of the British authorities to avoid further post-1921 tariff rises on British goods, or discriminatory tariff measures against Japanese imports; and the extent of opposition within the cotton industry, and Indians involved in the Indo-Japanese import-export trade. Such divisions made it far harder for the Bombay cotton industry to gain national support for protective measures against Japanese competition. Finally in this less certain Indian trade policy environment the Japanese cotton manufacturers showed little inclination to either formally or informally cooperate with the struggling Bombay cotton industry. In their submissions to the Indian government the Greater Japan Cotton Spinners' Association championed its right of equal access and paid scant attention to Bombay's problems. Furthermore its price cutting responses to the abolition of the internal excise duty and Bombay's labour difficulties in the late-1920s indicated that it would not compromise its commitment to free trade in both principle and practice. An attitude that could hardly be expected to engender popularity in Bombay.

Notes

1 Mitsubishi Keizai Kenkyūjo (1935): *Tōyō oyobi Nanyō Shokoku no Kokusai Bōeki to Nihon no Chii* [Asian International Trade and the Position of Japan]. Mistubishi Keizai Kenkyūjo, Tokyo, pp. 190-194.

2 In the 1920s imports of cotton piece-goods had a far greater share of Indian consumption than cotton yarn imports, Sugiyama S. (1986): Nihon Menseihin no Ajia Shijō Shinshutsu to Igirisu Shihon no Hannō (1890-1940) — Manchesutā Shōgyōkaigijō Shiryō o Chūshin toshite— [The Advance of Japanese Cotton Goods in the Asian Market and the response of British Capital— centered on Materials of the Manchester Chamber of Commerce—]. In Shimizu H. (ed.), *Ryo-taisenkanki Nihon Tōnan Ajia Kankei no Shosō* [Aspects of the Relationship between Japan and Southeast Asia in the Interwar Period]. Institute of Developing Economies, Tokyo, pp. 57-59.

3 Sugiyama S. (1990): Nihon no Menseihin Yushutsu to Bōeki Masatsu [Japan's Cotton Goods Exports and Trade Friction]. In Brown I. G., Sugiyama S. (eds.), *Senkanki Tōnan Ajia no Keizai Masatsu: Nihon no Nanshin to Ajia.Ō-Bei* [International Commercial Rivalry in Southeast Asia in the Inter-war Period: Japan, Southeast Asia, and the West]. Dōbunkan Shuppan Kabushiki Kaisha, Tokyo, p. 79; Honpō Menpu Menseihin no Nanyō Yushutsu ni tsuite [About the Exports of Japanese Cotton Piece-Goods to Southeast Asia]. *Dai Nihon Bōseki Rengōkai Geppō* [Monthly Report of the Greater Japan Cotton Spinners' Association] (*DNBRG*), November 19 14.

4 Shimizu H. (1986): 1920 Nendai ni okeru 'Nanshinron' no Kishu to Nanyō Bōeki Kaigi no Shisō [Trends in the 'Southward Advance Argument' and the Ideas of the South Seas Trade Conference in the 1920s]. In Shimizu H. (ed.), *Op. cit.*, p. 22.

5 Allen G. C. (1936-37): Recent Changes in the Organization of the Japanese Cotton Industry. *Transactions of the Manchester Statistical Society*: 18; Utley F. (1931): *Lancashire and the Far East*. George Allen & Unwin, London, pp. 83-85; Ellinger B., and Ellinger H. (1930): Japanese Competition in the Cotton Trade. *Journal of the Royal Statistical Society*, 93: pp. 206-207; Pearse A. S. (1929): *The Cotton Industry of Japan and China*. The International Federation of Master Cotton Spinners 'and Manufacturers' Associations, Manchester, pp. 18, 25-29.

6 Sugiyama S. (1990), *Op. cit.*, pp. 82-83.

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インドの銑鉄輸入にたいする日本の鉄鋼・鋼鉄産業の態度

ジョン・シャーキー

要旨：戦前の自由貿易経済体制を再現しようとする国際的な試みにもかかわらず、1920年代は、諸国がより公然たるビジネス ― 政府間協力を通じて経済的利益を維持しようと試みたために、経済関係がきわめて流動的な時代となった。このような文脈において、本論文は、インドと日本の間の経済的発展の相互作用に関連する、政治的・経済的要因を観察しようとするものである。本論文は、日本の銑鉄産業の発展がインドの輸入にたいして、そしてインドの木綿製造業が日本の輸入に与えた影響に、主たる焦点をあてる。この二つの過程は、海外の重要な供給国 ― その国との間には、その国の国内市場へのアクセスを維持し続けたいという強い利害が存在する ― を疎外することなく、国内の生産を刺激するための最も効果的な方法は何かという問を提起している。